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ART UNIT	PAPER NUMBER
2672	

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Please find below and/or attached an Office communication concerning this application or proceeding.

PTO-90C (Rev. 10/03)

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE <u>3</u> MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on <u>01 March 2004</u>.

2a)☒ This action is **FINAL**.   2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☐ Claim(s) _____ is/are pending in the application.

    4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-7, 11-21, 24-34, 37-42* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

    Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

    Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

    a)☐ All   b)☐ Some * c)☐ None of:

      1.☐ Certified copies of the priority documents have been received.

      2.☐ Certified copies of the priority documents have been received in Application No. _____.

      3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

    * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1)☐ Notice of References Cited (PTO-892)

2)☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)

3)☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date <u>May 07, 2001</u>.

4)☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .

5)☐ Notice of Informal Patent Application (PTO-152)

6)☐ Other: _____.

Response to Arguments

Applicant's arguments filed March 01, 2004 have been fully considered but they are not persuasive.

Applicant on page 11, second paragraph argues that Examiner has not been initialed copy of the 1449 dated May 3, 2001.

Examiner's reply: Examiner initialed the IDS under this Application on Aug. 04, 2003, a copy of the IDS is attached to this action. Applicant should check under list of references cited by Applicant (see second page) dated 10/29/2003.

Applicant on page 11, forth paragraph argues the Examiner has not established a prima facie case of obviousness-type double patenting. Also Applicant refers to a copending application no (09/778,715).

Examiner's reply: Applicant needs to correct the copending application no from (09/778,715) to 09/778,515. Applicant amended claims 1 in current application to present the components of the first gray element, (those are red, green and blue). Examiner refers Applicant to see page 2 of the specification of 09/778,515 lines 18-24 discloses the components of the gray element. Examiner assumes the term " a first gray element" is equivalent to " a gray element" since Applicant does not specify a second gray element in the claim 1 of the current application.

Applicant on page 11, last paragraph argues the present application does not specify such a feature as "dithered gray background representing a gray level of approximately 25-40%".

Examiner's reply: The copending application on page 3 lines 1-19 and page 5 lines 11-24 specifies a plurality of gray elements displayed by the display device that appears to most closely

blend with dithered gray background. Examiner's comment: The copending application specifies explicitly the range of gray level, and the present application specifies broader range (i.e. 0-100%), and the copending application uses the terms "dithered gray background representing a gray level .." and the present application specifies combination of the color channels away from the gray level. The meaning of both phrases is substantially equivalent to each other.

Applicant on page 12 argues that the Examiner's analysis is in error.

Examiner's reply: a person skill in the art assumes the combination of red, blue, green and gray values are between 0-100% of the display device. If the person skill in the art takes away the gray values of 25-40% off of 100%, the remaining of 100% should be a combination of red, blue and green or any one of these colors.

Applicant on pages 13-15 responses to Examiner's questions from the office action dated 10/29/2003.

Examiner's reply: regarding the questions, which are responded by the Applicant. Applicant should be describing more explicitly toward the invention rather repeating the claim languages.

Applicant on pages 15-16 argues about the reference Elaine does not teach the limitations in claim 1. Applicant argues on the same page the reference adjusts individual slider bars for the different colors in fig. 9 of the reference.

Examiner's reply: the claim language does not claim adjusting the colors simultaneously.

Applicant on page 16 in second paragraph argues the reference describes a control panel in Photoshop for adjusting display characteristics to achieve a desired gamma or gray balance. Rather than estimating characteristic of a display device, such as gamma or gray balance.

Examiner's reply: the above comparison is very similar to each other.

Applicant on page 16 last paragraph argues that Elaine merely describes an option by which the user can choose to display colors in RGB.

Examiner's reply: Elaine in fig. 10 illustrates clearly from the mode menu.

Applicant on page 17 first paragraph argues the reference Elaine does not teach an estimated gamma for a green channel of the display device.

Examiner's reply: Elaine on page 256 in fig. 9 and under subject of " to adjust the gamma:" discloses the limitations in claim language.

Applicant on page 18, all paragraphs argues Elaine does not provide a teaching that would have suggested characterization of the colorimetric response of the display device and the step of claims 3-4.

Examiner's reply: The steps of claims 2-4 are inherent in the reference Elaine, see the rejection.

Applicant on page 19 argues the Elaine does not mention the estimation of a coarse gamma and a fine gamma.

Examiner's reply: Elaine in fig. 9 page 256 illustrates a coarse (rough) gamma and a fine gamma.

Applicant on page 19, 2-3rd paragraphs argues the reference Elaine does not teach the claim languages in the claims 7-11, 13. Applicant on the same page argues the reference appears to be entirely devoid of such limitations.

Examiner's reply: Examiner believes the reference Elaine covers the claim languages in the claims. Elaine on page 256 in fig. 9 illustrates a slide bar for a plurality of green elements, which are represented lesser or greater gradation in green intensity.

Applicant on page 19 under claim rejection 103, argues the Examiner essentially applied Elaine as in the section 102 rejection, but acknowledged that Elaine does not explicitly specify transmitting information via a computer network.

Examiner's reply: The claims contain the limitation for transmitting information via network have been rejected under 35 U.S.C. 103(a). The claims do not contain the limitation for transmitting information via network have been rejected under 35 U.S.C. 102(b).

Applicant on page 19 last paragraph argues Elaine does not disclose a technique, wherein a display device is associated with a client residing on a computer network.

Examiner's reply: The Applicant's argument is obvious because Elaine on page 256 under number 10 discloses the current setting can be save as a file, a person skill in the art knows how to transmit the saved file from Elaine's work using Adobe on page 2-9, teaches windows NT that could operate as clients or servers. Examiner's comment: Applicant should be describing the main factor that affecting the gray balance of the display device, for example: a program, combination of hardware and software. The response to the following question may guide Applicant: does the transmitting information via network happen simultaneously associating with the estimation of gray balance of display device?

Applicant on page 20 argues that the limitations of claims 12, 38, 15, 41 and 16-26 are not covered by the reference Elaine, because Elaine fails to disclose the computer network.

Examiner's reply: The following claims 12, 38, 15, 41 and 16-26 have been rejected under 35 U.S.C. 103(a) as result of not covering the computer networks by the reference Elaine. Examiner's comment: Applicant does not disclose transmitting information via computer network in any other rejected claims under 35 U.S.C. 102(b).

Applicant on page 21 lines 1-2 argues that the Adobe reference provides no teaching sufficient to overcome the basic deficiencies in the Elaine reference.

Examiner's reply: as Applicant discloses on page 21 in 3-4 paragraphs that Adobe is designed to work with different operating systems (Windows NT, 95, 98 Mac OS) and also Elaine discloses on page 256 under number 10 than saves the file setting on a computer, the combination of Adobe and Elaine would have been satisfied the claim languages. A person skill in art knows the function of a network or a server that mentioned in the Adobe and the saved files in Elaine's work. Examiner's comment: the languages that would help Applicant's claim invention to overcome the references are as follows: when (how often) does the information transmit via a network? How does the information transmit via a network? Does the information consider as a smart program/file/information transmitting via a network?

Applicant on page 22 regarding claims 16 and 17 argues the references do not discuss transmission of information in a web cookie.

Examiner's reply: Web cookie or HTTP cookie or just cookies can contain any arbitrary information the server chooses and are used to maintain state between otherwise stateless HTTP transactions. Generally the function of Web cookie is similar as transmitting information via networks. Examiner's comment: The content and the main function of the Web cookies are important to be specified in the claim invention.

Applicant on pages 23-24 argues the background presented by the Brettel applet is not

dithered.

Examiner's reply: The reference Brettel applet on page 3 under step 2 illustrates

dithering option (more colors or shading or etc.), but does not explicitly specify the term

"dithered". The reference Berger on page 2 simulates the grays by dithering (the bottom row).

Examiner's questions:

1. How does an estimated gamma generate a first gray element?

2. What is an estimated gamma?

3. How does a set of red-blue shifted gray element generate?

4. Is there any special method to estimate a gray balance of display based on user

selection?

5. What are the values of Gamma for CRT and LCD displays?

6. Does this invention covers only in VGA system?

7. Does the gamma correction based on Voltage source?

Double Patenting

The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. See *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970);and, *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent is shown to be commonly owned with this application. See 37 CFR 1.130(b).

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

Claims 1, 5, 6, 7, 9, 11, 12, 13, 16, 17, 18, 22, 27, 29, 31, 32, 33, 35, 37, 38, 41 and 42 provisionally rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1, 6, 7, 8, 10, 12, 13, 14, 15, 16, 19, 21, 24, 25, 30, 31, 32, 34, 36, 37, 40 and 39 of copending Application No. 09/778,515. Although the conflicting claims are not identical, they are not patentably distinct from each other because, see below:

This is a <u>provisional</u> obviousness-type double patenting rejection because the conflicting claims have not in fact been patented.

<u>The comparison of claims 1,16 and 27 (the limitations shown by A', B', C', ...) over claims 1, 15, and 25 (the limitations shown by A, B, C, ...) of copending Application No. 09/778,515.</u>

➢ **Pending independent claim 1, of 09/778,515:** A method comprising: (A) generating gray elements and a dithered gray background for display on a display device, (B) the dithered gray background representing a gray level of approximately 25 to 40%; (C) estimating a gamma for the display device based on user selection of one of the gray elements that appears to most closely blend with the dithered gray background.

➢ **Pending independent claim 1, of 09/778,704:** A method comprising: (A') displaying on a display device a first gray element having reds green and blue values that are substantially equivalent to a selected green value based on an estimated gamma for a green channel of the display device; (B') displaying on the display device a set of red-blue shifted gray elements with green values substantially equivalent to the selected green value, wherein at least one of the red and blue values of each of the red-blue shifted gray

elements is different from the selected green value, and thereby represent shifts in the red channel, blue channel, or a combination of the red and blue channels away from the first gray element; (C') and estimating a gray balance of the display device based on user selection of one of the gray elements that appears to most closely blend with a gray background.

The comparison: The limitations A and C teach by A' and C'. But the limitation of B application specifies explicitly the range of gray level, and the present application specifies broader range (i.e. 0-100%), and the copending application uses the terms "dithered gray background representing a gray level.", however, B' and the present application specifies combination of the color channels away from the gray level. The meaning of both phrases is substantially equivalent to each other. A person skill in the art assumes the combination of red, blue, green and gray values are between 0-100% of the display device. If the person skill in the art takes away the gray values of 25-40% off of 100%, the remaining of 100% should be a combination of red, blue and green or any one of these colors.

> **Pending independent claim 15, of 09/778,515:** A system comprising: (A) a web server residing on a computer network, the web server transmitting web pages to remote clients residing on the computer network; (B) a color image server residing on the computer network, the color image server transmitting color images referenced by the web pages to the clients for display on display devices associated with the clients; (C) a color profile server residing on the computer network, the color profile server guiding the clients through a color profiling process to obtain information characterizing the color responses of the display devices associated with the clients, wherein the information includes a

gamma for the display device, the gamma being determined by selecting one of a plurality of gray elements displayed by the display device that appears to most closely blend with a dithered gray background that represents a gray level of approximately 25 to 40%; (D) and one or more color correction modules that modify the color images transmitted by the color image server based on the information to improve the accuracy of the color images when displayed on the respective display device.

➤ **Pending independent claim 16, of 09/778,704:** A system comprising: (A') a web server residing on a computer network, the web server transmitting web pages to remote clients residing on the computer network; (B') a color image server residing on the computer network, the color image server transmitting color images referenced by the web pages to the clients for display on display devices associated with the clients; and (C') a color profile server residing on the computer network, the color profile server guiding the clients through a color profiling process to obtain information characterizing the color responses of the display devices associated with the clients, wherein the information includes a gray balance for each of the display devices, and the color profiling process includes: displaying on a display device a first gray element having red, green and blue values that are substantially equivalent to a selected green value based on an estimated gamma for the green channel of the display device, displaying on a display device a set of red-blue shifted gray elements with green values substantially equivalent to the selected green value, wherein at least one of the red and blue values of each of the red-blue shifted gray elements is different from the selected green value, and thereby represent shifts in the red channel, blue channel, or a combination of the red and blue channels away from

the first gray element; and selecting one of the gray values that appears to most closely

blend with a gray background, and estimating the gray balance of the display device

based on the selected gray element; (D') and one or more color correction modules that

modify the color images transmitted by the color image server based on the information

to improve the accuracy of the color images when displayed on the respective display

device.

The comparison: The limitations of A, B, C and D teach by the A', B', C' and D'.

> **Pending independent claim 25, of 09/778,515:** A computer-readable medium

containing instructions that cause a programmable processor to: (A) display a plurality of

gray elements on a display device against a dithered gray background representing a gray

level of approximately 25 to 40%; (B) select one the gray elements that appears to most

closely blend with a dithered gray background; (C) and estimate a gamma for the display

device based on the selected gray element.

Pending independent claim 27, of 09/778,704: A computer readable medium comprising

instructions that cause a programmable processor to: (A') display on a display device a first gray

element having red, green and blue values that are substantially equivalent to a selected green

value based on an estimated gamma for a green channel of the a display device; (B') display on

the displace device a set of red-blue shifted gray elements with green values substantially

equivalent to the selected green value, wherein at least one of the red and blue values of each of

the red-blue shifted gray elements is different from the selected green value, and thereby that

represent shifts in the red channel, blue channel, or a combination of the red and blue channels

away from the first gray element; (C') and generate a gray balance of the display device based on

user selection of one of the gray elements that appears to most closely blend with a gray

background.

The comparison: The limitations B and C teach by the A' and C'. But the limitation of A states

25-40% gray level, however, B' limitation states red-blue shift gray level as a way to adjust the

second level. By adjusting the red-blue shift gray level, one can obtain gray level of 25-40% of a

limitation.

> **Pending dependent claims 6, 7, 8, 10, 12, 13, 14, 16, 19, 21, 24, 30, 31, 32, 34, 36, 37, 40 and 39 of 09/778,515 have the same claim invention of claims 5, 6, 7, 11, 12, 13, 17, 18, 29, 31, 32, 33, 37, 38, 41 and 42 of 09/778,704 respectively.**

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the

basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

1.   **Claims 1-4, 6-8, 11, 13, 27-30, 32-34, 37 and 39 rejected under 35 U.S.C. 102(b) as**

being anticipated by Elaine Weinmann and Peter Lourekas (Photoshop for windows),

hereafter refer "Elaine" with copyright of 1996.

2.   Claim 1.

Elaine on page 256 Fig. 9, and also refer to page 122 Fig. 10 and page 252 Fig. 2 illustrates the

step of "A method comprising: displaying on a display device a first gray element having reds

green and blue values that are substantially equivalent to a selected green value based on an

estimated gamma for a green channel of the display device; Elaine on page 15, Fig. 14 illustrates

the step of "displaying on the display device a set of red-blue shifted gray elements with green values substantially equivalent to the selected green value, wherein at least one of the red and blue values of each of the red-blue shifted gray elements is different from the selected green value, and thereby represent shifts in the red channel, blue channel, or a combination of the red and blue channels away from the first gray element"; Elaine on page 256, Fig. 9 illustrates the step of "estimating a gray balance of the display device based on user selection of one of the gray elements that appears to most closely blend with a gray background".

3.   Claim 2.

Elaine on page 256 Fig. 9, and also refer to page 15, Fig. 14 illustrates the step of "The method of claim 1, further comprising characterizing the colorimetric response of the display device based on the estimated gamma and estimated gray balance".

4.   Claim 3.

Elaine on page 256 Fig. 9, and also refer to page 111, Fig. 2 and page 252, Fig. 2 illustrates the step of "The method of claim 1, further comprising: selecting one of a plurality of green elements displayed by a display device that appears to most closely blend with a dithered green background; and estimating the gamma for the green channel of the display device based on the selected green element".

5.   Claim 4.

Elaine on page 256 Fig. 9, and also refer to page 111, Fig. 2 illustrates the step of "The method of claim 1, the method further comprising: modifying a color image based at least in part on the estimated gray balance; and delivering the modified color image to the display device".

6.   Claim 6.

Elaine on page 256, Fig. 9 illustrates the steps of "The method of claim 1, further comprising

determining the estimated gamma by: selecting one of a first plurality of green elements

displayed by the display device that appears to most closely blend with the dithered green

background; estimating a coarse gamma for the display device based on the selected one of the

first plurality of green elements; selecting one of a second plurality of green elements displayed

by the display device that appears to most closely blend with the dithered green background,

wherein the second plurality of green elements includes the selected one of the first plurality of

green elements; and estimating a fine gamma for the display device based on the selected one of

the second plurality of green elements, wherein the estimated fine gamma is the estimated

gamma".

7.   Claim 7.

Elaine on page 256, Fig. 9 illustrates the steps of "The method of claim 6, wherein the first

plurality of green elements represent greater gradations in green intensity that the second

plurality of green elements".

8.   Claim 8.

Elaine on page 256, Fig. 9 illustrates the steps of "The method of claim 1, further comprising

displaying the first gray element in a substantially central position relative to the red-blue shifted

elements,".

9.   Claim 11.

Elaine on page 256, Fig. 9 illustrates the step of "The method of claim 1, further comprising:

estimating the blackpoint of the display device; and characterizing the colorimetric response of

the display device based on the estimated gamma, blackpoint, and gray balance".

10.   Claim 13.

Elaine on page 256, Fig. 9 illustrates the step of "The method of claim 11, further comprising:

modifying a color image based on the estimated blackpoint, gamma, and gray balance; and

delivering the modified color image to the display device".

11.   Claim 27.

Elaine on page 256 Fig. 9, and also refer to page 122 Fig. 10 and page 252 Fig. 2 illustrates the

step of "A computer readable medium comprising instructions that cause a programmable

processor to: display on a display device a first gray element having red, green and blue values

that are substantially equivalent to a selected green value based on an estimated gamma for a

green channel of the a display device"; (Elaine on page 15, Fig. 14 illustrates the step of)

"display on the displace device a set of red-blue shifted gray elements with green values

substantially equivalent to the selected green value, wherein at least one of the red and blue

values of each of the red-blue shifted gray elements is different from the selected green value,

and thereby that represent shifts in the red channel, blue channel, or a combination of the red and

blue channels away from the first gray element"; Elaine on page 256, Fig. 9 illustrates the step of

"generate a gray balance of the display device based on user selection of one of the gray

elements that appears to most closely blend with a gray background",

12.   Claim 28.

Elaine on page 256, Fig. 9 illustrates the step of "The computer readable medium of claim 27,

wherein the instructions cause the processor to characterize the colorimetric response of the

display device based on the estimated gamma and estimated gray balance".

13.   Claim 29.

"The computer readable medium of claim 27, Elaine on page 256 Fig. 9, and also refer to page 15, Fig. 14 illustrates the step of wherein the instructions cause the processor to: select one of a plurality of green elements displayed by a display device that appears to most closely blend with a dithered green background; Elaine on page 256, Fig. 9 illustrates the step of "estimate the gamma for the green channel of the display device based on the selected green element".

14.   Claim 30.

Elaine on page 256, Fig. 9 illustrates the step of "The computer readable medium of claim 27, wherein the instructions cause the processor to: modify a color image based at least in part on the estimated gray balance; and deliver the modified color image to the display device".

15.   Claim 32.

Elaine on page 256, Fig. 9 illustrates the step of "The computer readable medium of claim 27, wherein the instructions cause the processor to determine the estimated gamma by: selecting one of a first plurality of green elements displayed by the display device that appears to most closely blend with the dithered green background; estimating a coarse gamma for the display device based on the selected one of the first plurality of green elements; Elaine on page 256, Fig. 9 illustrates the step of "selecting one of a second plurality of green elements displayed by the display device that appears to most closely blend with the dithered green background, wherein the second plurality of green elements includes the selected one of the first plurality of green elements; and estimating a fine gamma for the display device based on the selected one of the second plurality of green elements, wherein the estimated fine gamma is the estimated gamma".

16.   Claim 33.

Elaine on page 256, Fig. 9 illustrates the step of "The computer readable medium of claim 32, wherein the first plurality of green elements represent greater gradations in green intensity that the second plurality of green elements", The step is inherent because a gradual passing from green elements (one tint or shade) to another have greater gradation in green (color) intensity than the second green elements.

17.   Claim 34.

Elaine on page 256, Fig. 9 illustrates the step of "The computer readable medium of claim 27, wherein the instructions cause the processor to display the first gray element in a substantially central position relative to the red-blue shifted elements.

18.   Claim 37.

Elaine on page 256, Fig. 9 illustrates the step of "The computer readable medium of claim 27, wherein the instructions cause the processor to: estimate the blackpoint of the display device; and characterize the colorimetric response of the display device based on the estimated gamma, blackpoint, and gray balance".

19.   Claim 39.

Elaine on page 256, Fig. 9 illustrates the step of "The computer readable medium of claim 37, wherein the instructions cause the processor to: modify a color image based on the estimated blackpoint, gamma, and gray balance; and   deliver the modified color image to the display device".

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all

obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

20.   **Claims 5, 12, 15-21, 22, 24, 26, 31, 38 and 41-42 rejected under 35 U.S.C. 103(a) as**

being unpatentable over Elaine, and further in view of Adobe Technical Guides (copyright

2000; hereinafter referenced as "Adobe").

21.   Claim 5.

Elaine on page 256, Fig. 9 illustrates the step of "The method of claim 1, wherein the display

device is associated with a client residing on a computer network, the method further

comprising: transmitting information representing the estimated gray balance to a remote server

on the network; modifying the color image at the remote server based on the information; and

delivering the modified color image to the client via the computer network for display on the

display device". Elaine does not explicitly specify transmitting information via computer

network. However, Adobe on pages 2-9, teaches Windows NT, 95, 98 and Mac OS which could

operate as clients or servers. Using Adobe Gamma (color management workflow) can be

installed on a server or on a client workstation. As claim discloses that transmitting information

representing the estimated gamma to a remote server on the network; The Adobe gamma

modifies the color image when installed/executed on the server, a workstation, or on a network.

To one of ordinary skill in the art, it would have been obvious to use the green channel as the

range of gray levels. And also dither gray values because the two different gray areas

(background and center square) need to be generated in different ways for the process to work.

22.   Claim 12.

Elaine on page 256, Fig. 9 illustrates the step of "The method of claim 11, wherein the display

device is associated with a client residing on a computer network, the method further

comprising: transmitting information representing the estimated blackpoint, gamma, and gray

balance to a remote server on the network; modifying the color image at the remote server based

on the information; and delivering the modified color image to the client via the computer

network for display on the display device". Elaine does not explicitly specify transmitting

information via computer network. However, Adobe on pages 2-9, teaches Windows NT, 95, 98

and Mac OS which could operate as clients or servers. Using Adobe Gamma (color management

workflow) can be installed on a server or on a client workstation. As claim discloses that

transmitting information representing the estimated gamma to a remote server on the network;

The Adobe gamma modifies the color image when installed/executed on the server, a

workstation, or on a network. To one of ordinary skill in the art, it would have been obvious to

use the green channel as the range of gray levels. And also dither gray values because the two

different gray areas (background and center square) need to be generated in different ways for

the process to work.

23.   Claim 15.

Elaine on page 256, Fig. 9 illustrates the step of "The method of claim 1, wherein the display

device is associated with a client on a computer network, the method further comprising guiding

the client through the process of obtaining the estimated gray balance by delivering one or more

instructional web pages to the client". Elaine does not explicitly specify transmitting information

via computer network. However, Adobe on pages 2-9, teaches Windows NT, 95, 98 and Mac OS

which could operate as clients or servers. Using Adobe Gamma (color management workflow)

can be installed on a server or on a client workstation. As claim discloses that transmitting

information representing the estimated gamma to a remote server on the network; The Adobe

gamma modifies the color image when installed/executed on the server, a workstation, or on a

network. To one of ordinary skill in the art, it would have been obvious to use the green channel

as the range of gray levels. And also dither gray values because the two different gray areas

(background and center square) need to be generated in different ways for the process to work.

24.   Claim 16.

Elaine on page 256, Fig. 9 illustrates the step of "A system comprising: a web server residing on

a computer network, the web server transmitting web pages to remote clients residing on the

computer network; a color image server residing on the computer network, the color image

server transmitting color images referenced by the web pages to the clients for display on display

devices associated with the clients; and a color profile server residing on the computer network,

the color profile server guiding the clients through a color profiling process to obtain information

characterizing the color responses of the display devices associated with the clients, wherein the

information includes a gray balance for each of the display devices, and the color profiling

process includes: displaying on a display device a first gray element having red, green and blue

values that are substantially equivalent to a selected green value based on an estimated gamma

for the green channel of the display device, displaying on a display device a set of red-blue

shifted gray elements with green values substantially equivalent to the selected green value,

wherein at least one of the red and blue values of each of the red-blue shifted gray elements is different from the selected green value, and thereby represent shifts in the red channel, blue channel, or a combination of the red and blue channels away from the first gray element; and selecting one of the gray values that appears to most closely blend with a gray background, and estimating the gray balance of the display device based on the selected gray element; and one or more color correction modules that modify the color images transmitted by the color image server based on the information to improve the accuracy of the color images when displayed on the respective display device". Elaine does not explicitly specify transmitting information via computer network. However, Adobe on pages 2-9, teaches Windows NT, 95, 98 and Mac OS which could operate as clients or servers. Using Adobe Gamma (color management workflow) can be installed on a server or on a client workstation. As claim discloses that transmitting information representing the estimated gamma to a remote server on the network; The Adobe gamma modifies the color image when installed/executed on the server, a workstation, or on a network. To one of ordinary skill in the art, it would have been obvious to use the green channel as the range of gray levels. And also dither gray values because the two different gray areas (background and center square) need to be generated in different ways for the process to work.

25.   Claim 17.

Elaine on page 256, Fig. 9 illustrates the step of "The system of claim 16, wherein the color image server stores the information to the client in a web cookie, the client transmits the web cookie from the client to the server, and the color image server modifies the color image via the server based on the contents of the web cookie". Elaine does not explicitly specify transmitting information via computer network. However, Adobe on pages 2-9, teaches Windows NT, 95, 98

and Mac OS which could operate as clients or servers. Using Adobe Gamma (color management

workflow) can be installed on a server or on a client workstation. As claim discloses that

transmitting information representing the estimated gamma to a remote server on the network;

The Adobe gamma modifies the color image when installed/executed on the server, a

workstation, or on a network. To one of ordinary skill in the art, it would have been obvious to

use the green channel as the range of gray levels. And also dither gray values because the two

different gray areas (background and center square) need to be generated in different ways for

the process to work.

26.   Claim18.

Elaine on page 256, Fig. 9 illustrates the step of "The system of claim 16, wherein the color

profiling process includes: selecting one of a plurality of green elements displayed by a display

device that appears to most closely blend with a dithered green background; and estimating the

gamma for the green channel of the display device based on the selected green element". Elaine

does not explicitly specify transmitting information via computer network, however, Adobe on

pages 5 and 6, illustrates the gray elements are green elements representing a range of gray levels

for the green channel, and the dithered gray background is a dithered green background.

27.   Claim 19.

Elaine on page 256, Fig. 9 illustrates the step of "The system of claim 16, wherein the color

profiling process includes determining the estimated gamma by: selecting one of a first plurality

of green elements displayed by the display device that appears to most closely blend with the

dithered green background; estimating a coarse gamma for the display device based on the

selected one of the first plurality of green elements; selecting one of a second plurality of green

elements displayed by the display device that appears to most closely blend with the dithered

green background, wherein the second plurality of green elements includes the selected one of

the first plurality of green elements; and estimating a fine gamma for the display device based on

the selected one of the second plurality of green elements, wherein the estimated fine gamma is

the estimated gamma". Elaine does not explicitly specify transmitting information via computer

network, and also, Elaine on page 24, lines 1-18, teaches that the Photoshop will run on

Windows NT. The primary function of Windows NT is for networking area (Server.

Workstation, Client and etc.). However, Adobe on pages 2-9, teaches Windows NT, 95, 98 and

Mac OS which could operate as clients or servers. Using Adobe Gamma (color management

workflow) can be installed on a server or on a client workstation. As claim discloses that

transmitting information representing the estimated gamma to a remote server on the network;

The Adobe gamma modifies the color image when installed/executed on the server, a

workstation, or on a network. To one of ordinary skill in the art, it would have been obvious to

use the green channel as the range of gray levels. And also dither gray values because the two

different gray areas (background and center square) need to be generated in different ways for

the process to work.

28.   Claim 20.

Elaine on page 256, Fig. 9 illustrates the steps of "The system of claim 19, wherein the first

plurality of green elements represents greater gradations in green intensity that the second

plurality of green elements".

29.   Claim 21.

Elaine on page 256, Fig. 9 illustrates the step of "The system of claim 16, wherein the color

profiling process includes displaying the first gray element in a substantially central position

relative to the red blue shifted elements". Elaine does not explicitly specify transmitting

information via computer network, however, Adobe on page 5, illustrates the gray elements are

green elements representing a range of gray levels for the green channel, and the dithered gray

background is a dithered green background, the method further comprising: selecting one of the

selected green element and a plurality of red-blue shifted elements displayed by the display

device that appears to most closely blend with the second dithered green background displayed

by the display device; and estimating the gray balance of the display device based on the selected

one of the selected green element or selected red-blue shifted element.

30.   Claim 24.

Elaine on page 256, Fig. 9 illustrates the step of "The system of claim 16, wherein the color

profiling process includes: estimating the blackpoint of the display device; and including with

the information the estimated gamma and estimated blackpoint".

31.   Claim 26.

Elaine on page 256, Fig. 9 illustrates the step of "The method of claim 16, wherein the display

device is associated with a client on a computer network, the method further comprising guiding

the client through the process of obtaining the estimated gray balance by delivering one or more

instructional web pages to the client", Elaine does not explicitly specify transmitting information

via computer network, however, Adobe on pages 2-9, teaches Windows NT, 95, 98 and Mac OS

which could operate as clients or servers. Using Adobe Gamma (color management workflow)

can be installed on a server or on a client workstation. As claim discloses that transmitting

information representing the estimated gamma to a remote server on the network; The Adobe

gamma modifies the color image when installed/executed on the server, a workstation, or on a

network.

32.   Claim 31.

Elaine on page 256, Fig. 9 illustrates the step of "The computer readable medium of claim 27,

wherein the display device is associated with a client residing on a computer network, and the

instructions cause the processor to: transmit information representing the estimated gray balance

to a remote server on the network; modify the color image at the remote server based on the

information; and deliver the modified color image to the client via the computer network for

display on the display device", Elaine does not explicitly specify transmitting information via

computer network, however, Adobe on pages 2-9, teaches Windows NT, 95, 98 and Mac OS

which could operate as clients or servers. Using Adobe Gamma (color management workflow)

can be installed on a server or on a client workstation. As claim discloses that transmitting

information representing the estimated gamma to a remote server on the network; The Adobe

gamma modifies the color image when installed/executed on the server, a workstation, or on a

network.

33.   Claim 38.

Elaine on page 256, Fig. 9 illustrates the step of "The computer readable medium of claim 37,

wherein the display device is associated with a client residing on a computer network, and the

instructions cause the processor to: transmit information representing the estimated blackpoint,

gamma, and gray balance to a remote server on the network; modify the color image at the

remote server based on the information; and deliver the modified color image to the client via the

computer network for display on the display device", Elaine does not explicitly specify

transmitting information via computer network, however, Adobe on pages 2-9, teaches Windows

NT, 95, 98 and Mac OS which could operate as clients or servers. Using Adobe Gamma (color

management workflow) can be installed on a server or on a client workstation. As claim

discloses that transmitting information representing the estimated gamma to a remote server on

the network; The Adobe gamma modifies the color image when installed/executed on the server,

a workstation, or on a network.

34.   Claim 41.

Elaine on page 256, Fig. 9 illustrates the step of "The computer readable medium of claim 27,

wherein the display device is associated with a client on a computer network, and the instructions

cause the processor to guide the client through the process of obtaining the estimated gray

balance by delivering one or more instructional web pages to the client", Elaine does not

explicitly specify transmitting information via computer network, however, Adobe on pages 2-9,

teaches Windows NT, 95, 98 and Mac OS which could operate as clients or servers. Using

Adobe Gamma (color management workflow) can be installed on a server or on a client

workstation. As claim discloses that transmitting information representing the estimated gamma

to a remote server on the network; The Adobe gamma modifies the color image when

installed/executed on the server, a workstation, or on a network.

35.   Claim 42.

Elaine on page 24, lines 1-18, teach the step of "The computer-readable medium of claim 27,

wherein the instructions are contained both in physical data storage media and signals

transmitted between the client and other resources on the computer network". Elaine does not

explicitly specify transmitting information via computer network, however, Adobe on pages 2-9, teaches Windows NT, 95, 98 and Mac OS which could operate as clients or servers. Using Adobe Gamma (color management workflow) can be installed on a server or on a client workstation. As claim discloses that transmitting information representing the estimated gamma to a remote server on the network; The Adobe gamma modifies the color image when installed/executed on the server, a workstation, or on a network.

Claims 14, 25 and 40 rejected under 35 U.S.C. 103(a) as being unpatentable over Elaine, Adobe and "Why do Images Appear Darker on Some Displays? An Explanation of Monitor Gamma" By Robert W. Berger, copyright 1997 (referenced hereinafter as "Berger"), and further in view of "Display gamma estimation applet" by Hans Brettel, copyright 1999, said applet can be located at http://www.tsi.enst.fr/~brettel/TESTS/Gamma/Gamma.html (referenced hereinafter as "Brettel").

36.   Claim 14.

Elaine on page 256 Fig. 9, and also refer to page 15, Fig. 14 illustrates the step of "The method of claim 1, wherein the dithered gray background represents a gray level of approximately 33%". the Berger article, page 2, section titled "What is the gamma of my display system?". Herein, the article discusses the use of dither gray images in the setting of gamma for a display (which is the same process as in the Brettel applet). Further, the Berger article shows using gray values of 25%, 50%, and 75%. To one of ordinary skill in the art, it would have been obvious to use dither gray values as the background because of the conventionality of doing do (as shown by Berger) and because the two different gray areas (background and center square) need to be generated in different ways for the process to work.

37.   Claim 25.

Elaine on page 15, Fig. 14 illustrates the step of "The method of claim 16, wherein the dithered

gray background represents a gray level of approximately 33%". the Berger article, page 2,

section titled "What is the gamma of my display system?". Herein, the article discusses the use

of dither gray images in the setting of gamma for a display (which is the same process as in the

Brettel applet). Further, the Berger article shows using gray values of 25%, 50%, and 75%. To

one of ordinary skill in the art, it would have been obvious to use dither gray values as the

background because of the conventionality of doing do (as shown by Berger) and because the

two different gray areas (background and center square) need to be generated in different ways

for the process to work.

38.   Claim 40.

Elaine on page 15, Fig. 14 illustrates the step of "The method of claim 27, wherein the dithered

gray background represents a gray level of approximately 33%". the Berger article, page 2,

section titled "What is the gamma of my display system?". Herein, the article discusses the use

of dither gray images in the setting of gamma for a display (which is the same process as in the

Brettel applet). Further, the Berger article shows using gray values of 25%, 50%, and 75%. To

one of ordinary skill in the art, it would have been obvious to use dither gray values as the

background because of the conventionality of doing do (as shown by Berger) and because the

two different gray areas (background and center square) need to be generated in different ways

for the process to work.

Conclusion

THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time

policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE

MONTHS from the mailing date of this action. In the event a first reply is filed within TWO

MONTHS of the mailing date of this final action and the advisory action is not mailed until after

the end of the THREE-MONTH shortened statutory period, then the shortened statutory period

will expire on the date the advisory action is mailed, and any extension fee pursuant to 37

CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event,

however, will the statutory period for reply expire later than SIX MONTHS from the mailing

date of this final action.

Any inquiry concerning this communication or earlier communications from the

examiner should be directed to Javid A Amini whose telephone number is 571-272-7654. The

examiner can normally be reached on 8-4pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's

supervisor, Michael Razavi can be reached on 571-272-7664. The fax phone number for the

organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent

Application Information Retrieval (PAIR) system. Status information for published applications

may be obtained from either Private PAIR or Public PAIR. Status information for unpublished

applications is available through Private PAIR only. For more information about the PAIR

system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR

system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Javid A Amini
Examiner
Art Unit 2672

Javid Amini

JEFFERY BRIER
PRIMARY EXAMINER